

ZARVIN, Ye.Ya.; SHIROKOV, N.I.; GORDEYEVA, L.T.

Effect of the deoxidation method on nonmetallic inclusions  
and fatigue properties of rail steel. Izv. vys. ucheb. zav.;  
chern. met. 7 no.10:41-44 '64.

(MIRA 17:11)

1. Sibirskiy metallurgicheskiy institut.

L 3437-66 EWT(m)/EWP(i)/EWA(d)/T/EWP(t)/ENP(z)/EWP(b) IJP(c) MJW/JD/JG/GS  
 ACCESSION NR: AT5024874 UR/0000/65/000/000/0082/0088

AUTHOR: Grdina, Yu. V.; Gordeyeva, L. T.  
 44.55 44.55

TITLE: Diffusion coating of steel from a gaseous medium during induction heating with high-frequency currents

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Diffuzionnyye pokrytiya na metallakh (Diffusion coatings on metals). Kiev, Naukova dumka, 1965, 82-88

TOPIC TAGS: induction furnace, steel, metal coating, chloride, compound, diffusion coating

ABSTRACT: The diffusion coating of armco iron, carbon steel (0.64% C) and 38KhMA steel during their induction heating was investigated. Cr, Al, Si, W, Mo, B, as well as Ti with subsequent boronizing were used as the impregnating materials. The experimental setup is shown in Fig. 1 of the Enclosure. The specimens were heated in an airtight tube through which chlorides of the coating metals were passed. Gaseous chlorine was produced by interacting conc.  $H_2SO_4$  with  $KMnO_4$ , purified and dried, and admitted to the furnace containing a boat with the metal powder. The chlorides forming as a result of the high-frequency current heating of the metals in a stream of chlorine then were passed around the specimen and

Card 1/4

L 3437-65

ACCESSION NR: AT5024874

5

thereupon eliminated from the setup via a NaOH flask where the chlorine was absorbed. This setup was employed to perform the siliconizing, calorizing, chromizing, tungstenizing, molybdenizing, boronizing, and titanizing of the specimens, with subsequent determination of the microhardness of the case layer and base metal in each case. The gaseous chlorides formed at 600-650°C for Al and at 940-960°C for the other metals. Heating of the specimen was by the intermittent method with an overall exposure of 8-30 sec at 1000-1100°C (and in isolated cases, higher). The temperature of formation of the chlorides in the furnace was measured with a chromel-alumel thermocouple and the heating temperature of the specimens, with an OPPIR-09 optical pyrometer. The specimens were cooled in the atmosphere of chlorine and chlorides. It was thus possible to definitely establish the feasibility of the diffusion coating of iron and steels with Al, Si, Mo, Cr, W, Ti, and B from a gaseous medium -- chlorides of these metals -- on induction heating with high frequency currents. A comparison of case depths showed that the rate of coating of steel with metals from gaseous media on heating with high-frequency currents is several hundred times as high as on heating in a conventional furnace with the microhardness of the diffusion layer remaining within the normal limits. Orig. art. has: 6 figures

Card 2/4

L 3437-66

ACCESSION NR: AT5024874

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: MM, IE

NR REF SOV: 001

OTHER: 000

3/4

Card

L 3437-66

ACCESSION NR: AT5924874

ENCLOSURE: 01

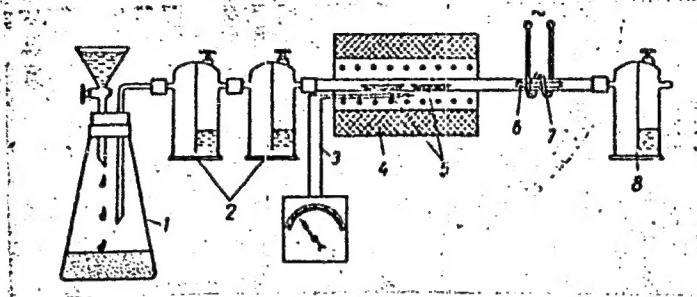


Fig. 1. Diagram of setup for diffusion coating

1 - flask with  $\text{KMnO}_4$  and  $\text{HCl}$ ; 2 - driers; 3 - thermocouple with galvanometer; 4 - furnace; 5 - boat with metal; 6 - specimen; 7 - inductor; 8 - flask with  $\text{NaOH}$

Card

4/14

DP

L 7656-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD/GS

ACC NR: AT5024875

SOURCE CODE: UR/0000/65/000/000/0109/0115

AUTHOR: Grdina, Yu. V.; Gordeyeva, L. T.; Timonina, L. T.

ORG: <sup>44.55</sup> Institute of Metalworking Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR) <sup>44.55</sup>

TITLE: Case hardening of titanium by carburizing and nitriding with high-frequency heating

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Diffuzionnyye pokrytiya na metallakh (Diffusion coatings on metals). Kiev, Naukova dumka, 1965, 109-115

TOPIC TAGS: hardening, case hardening, titanium case hardening, titanium carburizing, titanium nitriding, titanium carbonitriding

ABSTRACT: Case hardening of titanium and VT-4 and VT-6 titanium alloy by carburizing or nitriding has been investigated. Cylindrical specimens 3 mm in diameter and 200 mm long, and disks 40 mm in diameter and 10 mm thick were carburized by painting a silvery graphite paste, hf heating up to 850-1100C, and holding for 10-30 min in a helium atmosphere. A case 0.25 mm deep was obtained in 15 min on specimens 3 mm in diameter; its microhardness was 1780 HV50, dropping to 400 HV50 at a depth of 0.4 mm. The disk specimens were tested for wear resistance in dry friction at 220 rpm and a load of 750 n. Disks carburized for 15 min showed no wear after 4-hr tests. Disks carburized for a shorter or longer time had much lower wear resistance. Nitriding produced similar results. The specimens were nitrided for 6, 10, 15, or 20 min at 850-1100C in a nitrogen-

Card 1/2

L 7656-66

ACC NR: AT5024875

filled chamber under pressure of a 40—50 mm of water column. The thickest case (up to 30  $\mu$ ) was obtained by holding for 20 min. The case had a microhardness of up to 2000 dan/mm<sup>2</sup>. No wear was observed after a 4-hr wear-resistance test. The nitrided case was found to be much more oxidation resistant than titanium alloys. The weight loss of nitrided alloy specimens at 1000C in air was 75% lower than that of the initial alloy. Orig. art. has: 7 figures. [AZ]

SUB CODE: MM/ SUBM DATE: 06Aug65/ ORIG REF: 007/ OTH REF: 001/ ATD PRESS:

4141

Cord

L 52704-65 EWP(e)/EWT(m)/EWP(w)/EWA(d)/T/EWP(s)/EWP(k)/EWP(z)/EWP(b) Pf-4  
 IJP(c) HJW/AD

ACCESSION NR: AP5013161

UR/0129/65/000/005/0050/0052  
 669.295:669.3

AUTHOR: Grdina, Yu. V.; Gordeyeva, L. T.; Timonina, L. G.; Romashova, T. A.

TITLE: Diffusion impregnation of titanium alloys with copper

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 5, 1965, 50-52

TOPIC TAGS: titanium alloy, alloy impregnation, copper impregnated alloy,  
 impregnated layer property/VT3 titanium alloy, VT5 titanium alloy

ABSTRACT: A method of impregnation with copper of VT3 [U.S. PS 140] and VT5 titanium [4.0-5.0% Al, 1.0-2.0% Mn] alloys by pack cementation is described. Rolls 10 mm in diameter and rods with 4-mm diameter or cross section were descaled, then held in a mixture of 30-40% copper chips, 5-6% copper powder, 50-60% crushed quartz, dry clay, and 1% ammonium chloride, and held for 1-3 hr at 750-950C. A copper-impregnated layer 0.1-0.4 mm thick with a maximum microhardness of 1500 was obtained by this method. By a modified method, holding paste-coated specimens at 950C for 3 hr in an argon atmosphere, a copper-impregnated layer 0.3 mm thick with a microhardness of 1500 was obtained. The layer consisted of  $\text{TiCu}$ ,  $\text{Ti}_2\text{Cu}$ ,  $\text{Ti}_3\text{Cu}_2$  and  $\text{Ti}_4\text{Cu}_3$ .

Card 1/2



L 52704-65  
ACCESSION NR: AP5013161

In wear-resistance tests under a load of 75 kg under conditions of dry friction, the copper-impregnated rolls exhibited no weight loss, whereas the untreated rolls paired with hardened U12A tool steel lost up to 2.7 g per 1000 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

ATD PRESS: 4012

Card

2/2

ACC NR: AP6034026

SOURCE CODE: UR/0080/66/039/010/2236/2243

AUTHOR: Gordeyeva, L. Ya.; Kocherginskiy, M. D.; Pen'kova, L. F.

ORG: none

TITLE: On minimizing self-dissolution of zinc electrode in zinc-air cells with alkali electrolyte

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 10, 1966, 2236-2243

TOPIC TAGS: electrolytic cell, battery component, zinc air cell, zinc electrode, dry cell, *electrode design, zinc*

ABSTRACT: Specifications concerning purity, particle size, and amalgamation of zinc powder and composition of the paste for the zinc electrode, also concerning the purity of the alkali electrolyte, were developed as a result of experiments which were described. The purpose of the experiments was to minimize the rate of dissolution of zinc at the electrolyte-air interface in the stored or operating zinc-air battery of the "VOSTOK" type, which was developed in the past few years for radio power supply. The specifications developed were checked in discharge tests of the sealed individual cells and battery packs over a period of 1200 hr at a rate of 4 hr per day. Both the plate and filament batteries were tested, freshly made or stored for 15 months. The new battery pack of the "VOSTOK" type is 3.5 times lighter and

Card 1/2

UDC: 541.136

ACC NR: AP6034026

3 times smaller in volume than the serial pack of the zinc-air-manganese system of equal capacity. Thanks for consultations were expressed to Professor Z. A. Iofa.

Orig. art. has: 3 figures, 3 tables, and 6 formulas. [WA-100]

SUB CODE: 10/ SUBM DATE: 26Jul64/ ORIG REF: 016/

Card 2/2

KLYACHKO, N.S.; SHAPOSHNIKOVA, R.P.; MARTYSHEVA, L.N.; GORDEYEVA, L.Ya.;  
LAGONSKAYA, G.V.; PASHINA, I.L.

Results of mass immunization against mumps. Vop. virus. 10  
no.2:209-213 Mr-Apr '65. (MIRA 18:10)

1. Leningradskiy nauchno-issledovatel'skiy institut epidemiologii i  
mikrobiologii imeni Pastera, Pskovskaya oblastnaya i gorodskaya  
sanitarno-epidemiologicheskaya stantsiya i Pskovskaya detskaya poli-  
klinika.

KURDYUMOVA, T.N.; GORDEYEVA, L.Ye.

Reaction of 1-haloanthraquinone with primary aromatic amines in a  
nonaqueous medium. Zhur.ob.khim. 31 no.5:1569-1573 My '61.  
(MIRA 14:5)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i  
krasiteley imeni K.Ye.Voroshilova.  
(Anthraquinone) (Amines)

MOROZOVA, M.S.; SELEZNEVA, T.P.; GORDEYEVA, M.A.; TEMIN, L.I., otv. za  
vypusk; DEBERDEYEV, B.S., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Time and estimates norms for road work. Estimates are converted  
in accordance with the price scale introduced on 1-1 1961] Sbornik  
norm vremeni i rastsenok na dorozhnye raboty. Rastsenki pereschi-  
tany iskhodia iz masshtaba tsen, vvedennogo s 1/1 1961 g. Mo-  
skva, Avtotransizdat. Pt.2. [Construction and repair of highway  
bridges and conduits] Stroitel'stvo i remont avtodorozhnykh mo-  
stov i trub. 1962. 463 p. (MIRA 15:12)

1. Russia (1917- R.S.F.S.R.) Ministerstvo avtomobil'nogo trans-  
porta i shosseinykh dorog. Tsentral'naya normativno-issledovatel'-  
skaya stantsiya.

(Bridge construction) (Culverts)

GORDEYEVA, M. N.

GORDEYEVA, M. N.

1180. Colorimetric determination of small quantities of vanadium in materials of high chromium content. G. V. Orlovskaya and M. N. Gordyeva.

2

Vestnik Leningrad. Univ., 1955, (11), 139-149. Ref. Zhur. Khim., 1956, Abstr. No. 49,492. — To determine V when Cr is present, a weighed sample is fused in an iron crucible with  $\text{Na}_2\text{O}_2$  or in a platinum crucible with  $\text{Na}_2\text{CO}_3$  and  $\text{KNO}_3$ . The cooled, fused sample is leached with water, filtered, and the residue washed. The liq. extract is acidified with  $\text{H}_2\text{SO}_4$ . 5 ml of aq.  $\text{H}_2\text{O}_2$  (1:2) is added and 1 to 100 ml of 1% murexide is added. 2.5 ml of 0.1 M  $\text{NaWO}_4$  is added, and 20 ml of 40% aq.  $\text{NH}_4\text{OH}$  is added. The ppt. after being washed with 5% aq.  $\text{NH}_4\text{OH}$  is filtered off, dissolved in 5 ml of 10% aq.  $\text{NH}_4\text{OH}$ , and tested to remove  $\text{NH}_4^+$ . The solution is then used for the colorimetric determination of V. The method is applicable to the determination of V in materials of high Cr content. The method is also applicable to the determination of V in materials of high Cr content.

M. N.

GORDEYEVA, M.N.

137-58-3-6295

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 266 (USSR)

AUTHORS: Morachevskiy, Yu. V., Gordeyeva, M.N.

TITLE: Separation of Uranium and Vanadium With the Aid of Anion Resins  
(K razdeleniyu urana i vanadiya s pomoshch'yu smol-anionitov)

PERIODICAL: Vestn. Leningr. un-ta, 1957, Nr 10, pp 148-151

ABSTRACT: In order to effect the separation of U and V by the ion-exchange method, use was made of domestic anionites PE-9 and EDE-10 which belong to the class of strong bases. A solution of HCl was at first passed through a columnar container (with 10 g of the anionite) in order to charge the anionite with  $\text{Cl}^-$  ions. The hydrochloric acid solution to be investigated was then passed through the column at a rate of 1.5 cc/min. It was established that U is fully absorbed by the anionites if the acidity of the solution is 8 N or higher, while the V passes into the filtrate in its entirety regardless of the acidity of the solution. U ions absorbed by the anionites were washed out with water. The determination of U and V was completed by colorimetric methods or by weighing. The relative error does not exceed 2 percent at U and V content of 0.5-12 mg and 0.25-48 mg, respectively. V.N.

Card 1/1

GORDEYEVA, M.N.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516120020-4"

AUTHOR: Morachevskiy, Yu. V., Gordeyeva, M.N.

TITLE: The Separation of Molybdenum from Iron, Aluminum, and Calcium by Means of Anionites (Otdeleniye molibdena ot zheleza, alyuminiya i kal'tsiya s pomoshch'yu anionitov)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 9, pp. 1066-1067 (USSR)

ABSTRACT: All attempts made to separate molybdenum from iron, aluminum, and calcium from nitrate- and muriatic solutions are described. Separation was carried out with the anion-exchange resin PE-9. The anionite (10 g) was first treated with a normal solution of muriatic acid and later with a 0.5 solution of sodium hydroxide. It was then filled into a 30 cm column and put into the  $\text{NO}_3^-$  or  $\text{Cl}^-$  form by the passage of nitrate- and muriatic solutions of a certain concentration until the resin was fully saturated. Results show that a content of up to 0.525 g  $\text{SO}_4^{2-}$  and up to 0.043 g  $\text{Cl}^-$  does not reduce the completeness of absorption. Experiments further showed that in a muriatic solution molybdenum can be practically completely separated from the elements of the 2. and 3. analytical group. There are 3 tables and 5 Slavic references. Leningrad State University (Leningradskiy gosudarstvennyy universitet) Library of Congress

ASSOCIATION:

AVAILABLE:

Card 1/1

AUTHORS:

Morachevskiy, Yu. V., Gordeyeva, E. N., SOV/32-24-7-2/65  
Kruglova, T. Ye.

TITLE:

The Separation of Uranium, Vanadium and Chromium by Methods  
of Paper Chromatography (Razdeleniye urana, vanadiya i zheleza  
metodom khromatografii na bumage)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 7, pp. 790 - 793  
(USSR)

ABSTRACT:

The methods hitherto described have not permitted sufficiently  
accurate observations. As, besides, no method for the quanti-  
tative separation of these elements has been described, ex-  
periments were conducted which showed that a mixture of alcohol  
and of inorganic acids, used as a transport fluid, permits to  
separate U and V from Fe. It is, however, not possible to  
separate the three elements from each other. In this method, a  
circle chromatography is employed, using a mixture of glacial  
acetic acid and nitrous acid in a proportion of 95:5. The  
chromatographic paper (Nr 3 and 4) was subjected to a pre-  
treatment. In the determination a special arrangement was used,  
which is given in a figure. The transport fluid is applied by

Card 1/3



SOV/32-24-7-2/65

The Separation of Uranium, Vanadium and Chromium by Methods of Paper Chromatography

a small tube, which is stuffed with scraps of filter paper directly to the center of the paper, placed between two glass plates in an exsiccator. The duration of chromatography is given to be from 7 to 8 hours. A 5% calcium ferrocyanide solution was used as a reagent. Parallel with these experiments qualitative determinations employing the method of upward chromatography were carried out. The results are given. It appears from the description of the quantitative determination that from the cut-out paper pieces uranium was determined vanadometrically, iron colorimetrically and vanadium also colorimetrically by the phosphorus-tungstenate method. The content of iron should not exceed from 700 to 800  $\mu$ , whereas vanadium may be present in amounts of from 2 - 3 mg, as part of it remains in the filter paper of the tube and must be determined separately according to the principles of the method. The results showed that the method is applicable in quantitative determinations with amounts of from 5 - 550  $\mu$  uranium, 50 - 750  $\mu$  iron, and up to 2,5 mg vanadium and more in the mixture. There are 2 figures, 3 tables, and 12 references, 2 of which

Card 2/3

SOV/32-24-7-2/65

The Separation of Uranium, Vanadium and Chromium by Methods of Paper  
Chromatography

are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State  
University)

Card 3/3

GORDEYEVA, M.N.; PROSVIRYAKOV, V.D.

Separation of beryllium from aluminum and iron by ions exchange.  
Uch. zap. LGU no.297:5-9-'60. (MIRA 13:11)  
(Beryllium)

MORACHEVSKIY, Yu.V.; GORLEYEVA, M.N.

Separation of vanadium from phosphate ions by means of anion  
exchangers. Uch. zap. LGU no.297:10-15 '60. (MIRA 13:11)  
(Vanadium) (Phosphates)

GORDEYEVA, M.N.; MYAZDRIKOVA, M.N.

Separation of zirconium from uranium in sulfuric acid solutions  
on the anion exchanger EDE-10P. Uch. zap. LGU no.297:16-19 '60.  
(MIRA 13:11)

(Zirconium) (Uranium)

MORACHEVSKIY, Yu.V. [deceased]; GORDEYEVA, M.N.; PROKOF'YEVA, R.V.

Methods of analysis of lead and barium titanates and niobates.  
Zav.lab. 27 no.10:1200-1203 '61. (MIRA 14:10)

1. Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova.  
(Titanates) (Niobates) (Lead compounds)  
(Barium compounds)

L 36253-65 EWT(1)/EED-2 GS  
ACCESSION NR: AT5007827

S/0000/64/000/000/0122/0134

12  
11  
091

AUTHOR: Komissarova, T. Ye.; Gordeyeva, M. N.

TITLE: Chemical analysis of ferrites

SOURCE: Leningrad, Universitet, Metody kolichestvennogo opredeleniya elementov (Methods for the quantitative determination of elements). Leningrad, Izd-vo Leningr. univ., 1964, 122-134

TOPIC TAGS: ferrite analysis, manganese zinc ferrite, nickel aluminum ferrite, magnesium chromium ferrite, copper ferrite, cobalt ferrite, Cupferron complex, iron determination

ABSTRACT: Analytical methods for dissolving low-soluble ferrites, for separating and determining the components of ferrites, and for selective dissolution of the free oxide phases in ferrites were developed, including the analysis of the systems  $MnO-ZnO-Fe_2O_3$ ,  $NiO-Al_2O_3-Fe_2O_3$ ,  $MgO-Cr_2O_3-Fe_2O_3-CuO$ , and  $NiO-Cr_2O_3-Fe_2O_3-CuO-CoO$ , and of various model blends of oxide phases. Low-soluble ferrites such as nickel, chromium, nickel-zinc, or magnesium-aluminum compositions were dissolved readily by melting with potassium persulfate. Several of the analytical routes presented involve complexing of Fe with Cupferron and removal of the

Card 1/2

L 36253-65

ACCESSION NR: AT5007827

complex by extraction with ethyl ether for the determination of other components. The methods include conventional gravimetric and colorimetric methods, combined with wide application of complexometric titrations, and selected potentiometric, electrolytic, volumetric, and chromatographic measurements and separations. Fe<sup>2+</sup> in some low-soluble ferrites was determined by the bichromate method after dissolution in a HF-HCl mixture. "The authors acknowledge the assistance of G. G. Ryzhkova in the experimental work." Orig. art. has: 5 tables.

ASSOCIATION: none

SUBMITTED: 28Sep64

NO REF SOV: 005

ENCL: 00

SUB CODE: M1, GC

OTHER: 011

Card

2/2 50



VYSOKOVA, T.M., kand.med.nauk, AMIANTOVA, I.S., GORDEYEVA, M.V.

"Problems of therapy and functional examinations in tuberculosis;"  
collected papers of the L'vov Institute of Tuberculosis Research.  
Probl.tub. 36 no.5:117-120 '58 (MIRA 11:8)  
(TUBERCULOSIS)

GORDEYEVA, M. V.

Frequency of positive tuberculin reactions in children and adolescents according to data from mass examinations. Probl. tub. 40 no.4:17-23 '62. (MIRA 15:6)

1. Iz detskogo otdeleniya (zav. - prof. K. P. Berkos) Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdavookhraneniya RSFSR (dir. - kandidat meditsinskikh nauk T. P. Mochalova, zam. dir. po nauchnoy chasti - prof. D. D. Aseyev)

(TUBERCULIN--TESTING)

PEROV, Ye.V.; TOLMACHEVA, L.P.; GORDYNEVA, N.N.

Solubility of calcium nitrate in nitric acid. Zhur. prikl. khim.  
33 no.9:2140-2141 1960. (MIRA 13:10)  
(Calcium nitrate)

POGODAYEV, K.I.; TUROVA, H.F.; GORDEYEVA, N.P.

Physiological mechanism of the formation of an electroconvulsive seizure resembling epilepsy. Trudy Inst.vys.nerv.deiat.Ser.fiziol. 4:198-209 '60. (MIRA 13:7)

1. Iz Kabineta biokhimii mozga Instituta vysshey nervnoy deyatel'-nosti AN SSSR. Zaveduyushchiy kabinetom - K.I. Pogodayev.  
(ELECTRICITY--PHYSIOLOGICAL EFFECT) (NERVOUS SYSTEM)

ACC NR: AT6036537

SOURCE CODE: UR/0000/66/000/000/0130/0131

AUTHOR: Gordeyeva, N. P.; Il'yank, V. A.

ORG: none

TITLE: Effect of prolonged vestibular and optokinetic stimulation on frequency spectra and on the assimilation of the rhythms of light flashes seen in electrocorticograms of various parts of the brain of rabbits [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966.]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 130-131

TOPIC TAGS: biologic acceleration effect, coriolis acceleration, electroencephalogram, visual analyzer, vestibular analyzer, nystagmus

ABSTRACT: Tests were conducted on rabbits with implanted electrodes in the visual, parietal, motor, and frontal areas of the brain cortex and in the reticular formation of the midbrain. The individual and combined effects of vestibular (rotation on a Barani chair) and optokinetic stimuli (rotation of light and dark stripes around the rabbit) were rated as a function of the EEG frequency spectrum and the magnitude of the reaction of rhythm assimilation to low- (5-6 cps) and high-frequency (20-30 cps) light flashes with 80 sec

Card 1/3

ACC NR: NT6036537

durations. Measurement of EEG frequency components was conducted by averaging readout from a two-channel "Walter" analyzer and one of simpler construction.

Vestibular stimuli caused EEG frequency spectra of all investigated brain areas to decrease for all frequencies except the very lowest (4—7 cps). Optokinetic stimuli caused regular decreases in frequency spectra only in the visual region and to a lesser degree in the reticular formation; in other brain areas, the spectra either showed no substantial change or somewhat exceeded baseline values. During the combined action of vestibular and optokinetic stimuli, an absolute drop in all frequencies was observed starting with 6—7 cps. At 4 cps, there was a sharp increase which indicated a shift of the dominating rhythm to lower frequencies. Both the individual and combined action of vestibular and optokinetic stimuli caused an absolute drop in the magnitude of rhythm assimilation to high and low frequencies in all brain regions during low-intensity light flashes.

A comparison of these data with the results of other research on the dependence between EEG frequency spectra and rhythm assimilation and the functional state of the brain indicates that the prolonged effect of both vestibular and optokinetic stimuli causes a regular deterioration in the functional

Card 2/3

ACC NR: AT6036537

state of all cortical components and the reticular formation of the rabbit midbrain. This can be compensated by other stimuli, e. g., sharp, constant, or rhythmic light which can diminish or fully eliminate a drop in brain excitability. [W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Cord 3/3

YEMEL'YANOV, A.G., nauchnyy sotrudnik; MILASHEVSKAYA, Ye.A., nauchnyy sotrudnik;  
GORDEYEVA, N.V., nauchnyy sotrudnik

New assortment of "pologen" dyes. Tekst.prom. 25 no.1:59-62 Ja '65.  
(MIRA 18:4)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i krasiteley.



BYAL'SKIY, A.L., nauchnyy sotrudnik; KARPOV, V.V., nauchnyy sotrudnik;  
Prinimali uchastiye: RATNOVSKAYA, Ye.D., nauchnyy sotrudnik;  
GORDEYEVA, N.V., nauchnyy sotrudnik; KRASIKOVA, N.N.; nauchnyy  
sotrudnik; KLEYMENOVA, L.I., nauchnyy sotrudnik

Using the suspension method on a continuous apparatus for the  
dyeing of fabrics with vat dyes. Tekst. prom. 25 no.8:58-60  
Ag '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i krasiteley (NIOPAK) (for Byal'skiy, Karpov, Ratnovskaya, Gordeyeva,  
Krasikova). 2. Tsentral'nyy nauchno-issledovatel'skiy institut  
khlopchatobumazhnoy promyshlennosti (for Kleymenova).

GORDEYEVA, R. I.

2207. Determination of small amounts of cobalt.  
I. G. Shatun and R. I. Gordyeva. *Trudy Vses.  
Nauk. Inst. Khim. Resheniya*, 1956, 21, 26-32;  
Ref. Zhur. Khim., 1956, Abstr. No. 64,777. — To  
determine Co ( $10^{-4}$  %) in chemical reagents,  
CoO<sub>2</sub> obtained by oxidation with K<sub>2</sub>MnO<sub>4</sub> is  
copptd with MnO<sub>2</sub>, the ppt is dissolved in 1 ml of  
conc. H<sub>2</sub>SO<sub>4</sub> containing 0.1 ml of 30% H<sub>2</sub>O<sub>2</sub>, and the  
soln is evaporated to dryness. The residue is  
dissolved in water, 0.5 ml of 0.1% urroso-R salt  
soln and 1 ml of saturated Na acetate soln, which  
has been neutralized to pH  $\approx$  6.5, are added, the  
soln is boiled for 1 min. 1 ml of dil HClO<sub>4</sub> (1 + 1)  
is added, and the soln is then evaporated to a vol.  
of 3 to 4 ml. The colour is compared with that of  
standards; prepared similarly. The error is  $\pm$  0.05  $\mu$ g  
of Co. G. S. SMITH

fra

L 57084-65 EMT(m)/EPF(c)/EMP(j)  
ACCESSION NR: AP5013735

Pe-h/Pr-4 R1

UR/0138/65/000/005/0035/0036  
678.063.01:539.4.011.21

AUTHORS: Kusov, A. B.; Darovskikh, G. T.; Gordeyeva, S. S.; Filippova, T. I.

TITLE: Investigating the proportionality limits of stresses during the stretching of rubber

SOURCE: Kauchuk i rezina, no. 5, 1965, 35-36

TOPIC TAGS: rubber, stress measurement, vulcanizate, relaxation processes, rubber, SKB rubber, SKD rubber, NK rubber, SKI 30 Nairit rubber

ABSTRACT: Static and equilibrium stresses are generally related linearly on a simple proportionality factor, and the validity of this factor and the limits of its application were investigated. Tests were made in water by a technique previously developed at NIIRP. It was found that the factor holds only so long as physical relaxation is not significant. The non-linearity is due to chemical relaxation. This is caused by the appearance of destructive processes in vulcanizates. Gas chamber and lampblack had little effect on changing the limit of the proportionality factor in the zone of strong stretching. Tests were made on SKS-30, SKB, SKD, NK, Card 1/2

L 57084-65

ACCESSION NR: AP5013735

2

SKI-30, and <sup>15</sup>neoprene rubber, with similar results. It was concluded that the basic factors affecting the limits of proportionality between the acting stresses appear to be the structure of the rubber and the degree of vulcanization. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensoveta (Leningrad Technological Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, OC

NO RLT SOV: 005

OTHER: 000

Card

2/2

28 (5)

AUTHORS:

Volodina, T. A., Gordeyeva, T. A.,  
Fridman, Ya. B.

SOY/32-25-8-29/44

TITLE:

Methodology of Investigation of the Microgeometry of the  
Surfaces of Fractures

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 984-989 (USSR)

ABSTRACT:

Assuming that the height of unevenness on fracture surfaces (F) increases under same conditions with the increase of the velocity of spreading of the cracks (C) one can apply visual, fractographic and similar methods for clarification of the destruction kinetics. The profilogram of the (F) was obtained in the present case with an optic-mechanical profilograph IZP-5 (Ref) at a 500x enlargement in vertical direction (Fig 1) of the profile and in 50x enlargement in horizontal direction, thus the unevenness could be measured in a height of 2-240 $\mu$ . To accelerate the measuring a special device was developed (Fig 2) in collaboration with N. V. Ryazanov, V. M. Markochev and Yu. A. Bulanov. The device consists of a measuring dial and a counter. They investigated (F) on samples of steel 30KhGSNA, 40KhNMA and a highly resistant experimental steel A, applying varying kinds of stresses and sample shapes and the samples were subjected to thermal treatment. The various

Card 1/2

Methodology of Investigation of the Microgeometry of  
the Surfaces of Fractures

SOV/32-25-8-29/44

character of the changes of the unevenness along the (F) is apparently caused by the property of the material to "inhibit" the spreading of the (C). The efficiency of this "inhibiting" depends on the properties of the material, the magnitude of tensions, the kind of stress and other factors. The experiments proved that the steel 30KhGSNA has a higher "inhibiting" capacity (C) than steel A. It was established that in several cases the character of the change of the unevenness along the (F) was determined by the level of the primary tension and the steepest increase of unevenness was observed at an increase of the stress at a high tension level. The measurements of the height of the unevennesses of (F) after repeated static and impact-bending tests permits a qualitative evaluation of the conditions of destruction and the change in one of the following factors: condition of the material, the magnitude of the repeated stress, the character of the stress and the presence of a tension-concentrator on the test-surface. There are 8 figures and 2 Soviet references.

Card 2/2.

PHASE I BOOK EXPLOITATION

SOV/3740

Fridman, Ya. B., T.A. Gordeyeva, and A.M. Zaytsev

Stroyeniye i analiz izlomov metallov (The Structure and Analysis of Metal Fractures), Moscow, Mashgiz, 1960. 127 p. 4,500 copies printed.

Reviewer: A.A. Gol'denberg, Candidate of Technical Sciences; Ed.: L.M. Shkol'nik, Candidate of Technical Sciences; Tech. Eds.: R. Dobritsina and A.F. Uvarova; Managing Ed. for Literature on Metal Working and Machine-Tool Manufacture (Mashgiz): V.V. Rzhavinskiy.

PURPOSE: This book is intended for technologists, physical metallurgists, and designers engaged in the design, manufacture, and operation of various types of machinery.

COVERAGE: The book presents the principles of the modern theory of failure together with such analysis of the structure of fractures as is necessary for a correct understanding of failures resulting from the application of ordinary short-time, long-time, static, and fatigue loads. The numerous examples of such analyses, taken from various branches of machinery manufacturing, are accompanied

Card 1/5

The Structure (Cont.)

SOV/3740

by detailed instructions for verification. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Preface	3
Ch. I. Classification of Fractures and Basic Trends in Their Investigation	5
Ch. II. Methods of Studying Fractures	10
Visual and macroscopic examination of fracture surface	10
Microscopic investigation of fracture-surface structure by means of optical and electron microscopes	18
Differential ink-marking method	20
X-ray analysis of the surface-layer structure of fractures	21
Methods of studying the microgeometry of fracture surfaces	25
Mechanical profiling of surface by a probing needle	28
Optical profiling (light-beam method)	29
Taking casts of fracture surfaces	31

Card 2/5



The Structure (Cont.)

SOV/3740

Cutting the specimen into pieces [perpendicular to the fracture surface]	33
Methods of measuring roughness height and angles of inclination of microsections by means of profilograms	33
Ch. III. Structure of Fractures as Related to Conditions of Deformation and Failure	38
Basic characteristics of the process of deformation and failure of materials	38
Fractures occurring under regular short-time loading	48
Brittle and semibrittle fractures	48
Plastic fractures	65
Fractures occurring under long-time static loads	68
Gradual failure at normal temperature	68
Failure at elevated temperatures	70
Fatigue fractures	71
Typical fatigue fractures	77
Analysis of a fatigue fracture	90
Ch. IV. Structure of Fractures as Related to Quality of Material	96
Methods of determining the quality of the metal from the fracture	97
Card 3/5	

The Structure (Cont.)

SOV/3740

Defects in the material revealed in the fracture	99
Flakes in the fracture	99
Inclusions	100
White spots	101
Shrinkage porosity	102
Laminations	102
Banding	104
Flaky and laminated fractures	104
Black fracture	106
Fracture of steel in overheating	107
Ch. V. Basic Methods of Establishing Causes of Failure of Parts	110
Evaluating the general condition of the object of investigation	111
Analysis of the external condition	112
Evaluating the quality of production and the material of the part	116
Analysis of operating conditions	117
Generalizing the results of the investigation	119

Card 4/5

The Structure (Cont.)

SOV/3740

Fracture Terminology

121

AVAILABLE: Library of Congress

Card 5/5

VK/jb  
6-20-60

25637

S/032/61/027/007/008/012  
B110/B203

15.2610

AUTHORS: Gordeyeva, T. A., Volodina, T. A., and Zaytsev, A. M.

TITLE: Structural properties of fatigue failures of samples and machine parts made of refractory alloys

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 7, 1961, 894-899

TEXT: The origin of fractures (by fatigue, brittleness) must often be judged from their appearance. The fractures of refractory Ni - Cr alloys (of the deformable types ЖМ437 (EI 437) and ЖМ 617 (EI 617), as well as of cast alloys) do not show the typical fatigue phenomena of fractures of structural steels. Since the fatigue failures of refractory alloys show some common features with fractures of aluminum and magnesium alloys, their structural peculiarities are due to working conditions and material structure. Some fractures of gas turbine blades and disks were examined visually and fractographically on a special apparatus in the area of least spring tension. Two notches were applied in such a way that the remaining neck was 15 mm. The blades were loaded statically or periodically (eccentric

Card 1/6

25637

S/032/61/027/007/008/012  
B110/B203

Structural properties of fatigue ...

mechanism). They were heated with a benzene - air mixture, and their temperature was measured with an optical pyrometer. An investigation of blades made of ЭИ 437Б (EI 437 B) alloy and cast alloy (Table) showed the following: In their fractures, focus and center are less distinct than in structural steels since there are many focuses in fatigue failures under simultaneous action of variable stresses and high temperatures (e.g., on gas turbine parts). The fracture focus has a facet with smoother surface than the other facets in the zone of fatigue propagation of the crack, and is not, as in structural steels, perpendicular to the direction of most extended stresses. It is often small, and little different from the rest of the fatigue zone. Here, the start of destruction is determined from the orientation of the ribs formed by the confluence of surface destructions. The latter begin in different, adjacent focuses. The fold relief is also oriented toward the start of destructions. With increasing destruction propagation in the depth, the height of ribs decreases. Since the first cracks are often far apart, especially the ribs distant from the destruction center do not flow together. The following characteristics were established: (1) Simultaneous formation of several focuses; (2) development of destruction on some gliding surfaces in the crystallite;

Card 2/6

25637

S/032/61/027/007/008/012  
B110/B203

Structural properties of fatigue ...

(3) formation of several cracks. Hyperbolic lines in the center of fatigue destruction of cast steel indicate: (1) the formation of many local focuses, and (2) the confluence of primary cracks into one destruction surface. Distinct fatigue lines proceeding through the entire destroyed section are not discernible; wavelike lines beginning and ending at the boundaries of a grain are sometimes observed. The gradualness of destruction development can be observed on annular stripes of differently colored oxide films which may, however, be missing at low temperatures, high stresses, and quick destruction propagation. Typical fatigue lines usually appear in the form of rings at low temperatures and under high vibrational stresses. Characteristic are the displacement microsurfaces forming jointly the fold relief on the surface of destroyed grains. These facets differently oriented in space are the destruction surfaces of one or more adjacent grains of equal orientation. Here, a smooth part and a fold-relief part proceeding therefrom are discernible. On one facet, the folds are equally oriented: fan-shaped or nearly parallel. The fold surface of the elementary facets is probably formed due to destruction along adjacent shear planes and confluence of these destructions. The shape of a fan is probably due to rotation of the crystal regions round an axis. The mentioned characteristics in

Card 3/6

25637

B/032/61/027/007/008/012  
B110/B203

# Structural properties of fatigue ...

cylindrical samples, blade- and disk tests were observed on the test plant and in turbine operation. Under complicated operational conditions, the zone arrangements in the fracture are different. Only at 500-550°C for EI 437 B and 700-800°C for cast alloy, and under high vibrational loads, the destruction behaves like a fatigue failure. The destruction of scarf joint parts and projections between the scarf joints is of fatigue character: continuous lines pass through the entire section, and the fold relief is oriented. Since, besides high temperature and static load, also the effect of the macroscopic concentrator (longitudinal groove) is noticeable, there are more centers than in the fracture of smooth profile parts. [Abstracter's note: seven photographs, not reproducible.] There are 7 figures, 1 table, and 2 Soviet-bloc references.

## Table. Test conditions of blades.

Legend: (1) Blade material, (2) test temperature, °C, (3) amplitude value of stresses, kg/mm<sup>2</sup>, (4) number of cycles before start of destruction, (5) note, (6) EI 437 B, (7) cast alloy, (8) ditto, (9) with single loading until complete destruction, (10) with periodic amplitude changes of stresses, (11) with 12-fold heat change, (12) with 4-fold heat change, (13) until

Card 4/6

25637

S/032/61/027/007/008/012  
B110/B203

Structural properties of fatigue ...

formation of cracks, (14) periodic stress and temperature changes, (15)  
periodic stress change until formation of cracks.

Card 5/6



BOKSHTEYN, S.Z. (Moskva); KISHKIN, S.T. (Moskva); LOZINSKIY, M.G. (Moskva);  
SOKOLKOV, Ye.N. (Moskva); Prinsipali uchastiye: PODVOYSKAYA, O.N.;  
ZILOVA, T.K.; SOROKINA, K.P.; POLYAK, E.V.; MOROZ, L.M.;  
BULYGIN, I.P.; LASHKO, N.F.; POKAMESTOVA, T.N.; GORDEYEVA, T.A.;  
YAGLOV, R.V.; VOLODINA, T.A.; KORABLEVA, G.N.; ANTIPOVA, Ye.I.

Thermomechanical treatment of chromium-nickel-manganese  
austenitic steel. Izv. AN SSSR. Otd. tekhn. nauk. Met. i topl.  
no.2:15-21 Mr-Ap '62. (MIRA 15:4)  
(Chromium-nickel steel—Hardening)

G. GORDEYEVA, T. B.  
USSR/Chemistry - Elastomers

FD-2525

Card 1/1 Pub. 50 - 4/14

Authors : Tager, A. A., Cand Chem Sci; Gordeyeva, T. B., Karlinskaya,  
D. Yu., Kurochkina, L. M.

Title : Methods of evaluating some technological properties of sodium  
butadiene rubbers

Periodical : Khim. prom. No 4, 209-213, Jun 1955

Abstract : Describe the method of "foaming" and the method of thermomechanical  
curves, which can be used in evaluating the capacity of rubbers to  
form a tridimensional structural network. Ten references, all of  
them USSR, 8 since 1940. Three graphs, 2 tables.

Institutions : Ural State University; Sverdlovsk Ebonite Products Plant

BABICH, A. G.; GORDEYEVA, T. K.; KAMENETSKAYA, I. V.; LARIN, I. V.

Feeding and Feeding Stuffs

Ways of solving the forage problem in the Stalingrad Canal district. Bot. zhur.  
37 no. 3, 1952. Botanicheskiy Institut im. V. L. Komarova, Akademii Nauk SSSR  
Recd. March 10, 1952.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED

GORDNYEVA, T.K.

Biology of *Artemisia pauciflora* Web. Trudy Bot. inst. Ser. 3 no.11:  
88-117 '57. (MLRA 10:8)

(*Artemisia*)

LARIN, I.V., akademik; GORDEYEVA, T.K., kand.biol.nauk

Some results of botanical work on forage plants conducted at the  
Dzhanybek station in the semidesert between the Volga and Ural Rivers.  
Dokl. Akad. sel'khoz. 23 no.4:3-6 '58. (MIRA 11:5)  
(Volga Valley--Forage plants)

GORDIYENKO, T.K.

Dynamics of natural vegetation in the semidesert (based on studies at the Dzhanybek Station). Bot.zhur. 44 no.9:1238-1248 S. '59. (MIRA 13:2)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR, Leningrad. (Dzhanybek region--Botany--Ecology)

GORDEYEVA, T.K.

Dynamics of soil and plant complexes in the Caspian Lowland. Probl.  
bot. 6:354-363 '62. (MIRA 16:5)  
(Caspian Lowland--Botany--Ecology) (Caspian Lowland--Soils)

GORDEYEVA, T.K.

All-Union conference-seminar on the improvement of natural grass-lands and on the development of cultivated highly productive pastures and meadows. Bot. zhur. 48 no.11:1721-1724 N '63. (MIRA 17:4)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.



GORDEYEVA, T.K.

At the Third Conference of the All-Union Botanical Society.  
Bot. zhur. 49 no.2:304-306 F '64. (MIRA 17:6)

1. Botanicheskiy institut imeni V.L. Komarova Akademii  
nauk SSSR, Leningrad.

GORDEYEVA, Tat'yana Konstantinovna; LARIN, Ivan Vasil'yevich;  
YUNATOV, A.A., doktor biol. nauk, otv. red.

[Natural vegetation in the semidesert of the Caspian Sea  
region as a feed supply in animal husbandry; as exam-  
plified by the Dzanybek Field Station] Estestvennaia ra-  
stitel'nost' polupustyni Prikaspiia kak kormovaia baza  
zhivotnovodstva; na primere Dzhanybetskogo statsionara.  
Moskva, Nauka, 1965. 159 p. (MIRA 18:9)

GORDEYEVA, T. N.

20915 Gordeyeva, T. N. Rol' zheltoy akatsii (Saragana Arborescens Lam.) kak potleska v iskusstvennykh sosnovykh nasazhdeniyakh lesostepnoy zony. Uchen. zapiski (Lenigr. gos. ped. in-t im. Gertsena), t. LXXXII, 1949, s. 25-82. - Biblioga: 79 nazv.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

GORDIYEVA, T.N.; KHUBERO, Yu.K.; PIS'YANKOVA, V.V.; SHISHKIN, B.K.,  
professor, redaktor.

[Practical course in plant classification; textbook for pedagogical institutes] Prakticheskii kurs sistematiki rastenii; posobie dlia pedagogicheskikh institutov. Pod red. B.K.Shishkina. Moskva. Gos. uchebno-pedagog. izd-vo, 1953. 379 p. (MLA 7:7)

1. Chlen-korrespondent Akademii nauk SSSR (for Shishkin)  
(Botany--Classification)

GORDEYEVA, Tamara Nikolayevna; ZAVALISHINA, Sofiya Fedorovna; KRUBERG,  
Yuliy Karlovich; PIS'YAUKOVA, Vera Vasil'yevna; STRELKOVA, Ol'ga  
Stepanovna; GURDZHIYHVA, A.M., tekhnicheskiiy redaktor

[Summer field work in botany; manual for pedagogical institutes]  
Letniaya polevaya praktika po botanike; posobie dlia pedagogiche-  
skikh institutov. Leningrad, Gos. uchebno-pedagog. izd-vo Minister-  
stva prosveshcheniia RSFSR, Leningradskoe otd-nie, 1954. 285 p.  
(Botany--Field work) (MIRA 8:7)

ALPAT'YEV, Anatoliy Mikhaylovich; ARKHANGEL'SKIY, Aleksandr Mikhaylovich;  
GORDEYEVA, Tamara Nikolayevna; TEREKHINA, G.I., red.; TSYPO,  
E.V., tekhn.red.

[Field practices in physical geography; geomorphology, geography of  
soils, phytogeography, general practices] Polevaia praktika po  
fizicheskoi geografii; geomorfologiya, geografiya pochv, geografiya  
rastenii, kompleksnaya praktika. Moskva, Gos.uchebno-pedagog.  
izd-vo M-va prosv. RSFSR, 1958. 185 p. (MIRA 12:4)  
(Physical geography)

GORDEYEVA, T.N.

Meadows of Cherepovets District in the area served by the  
Cherepovets Machine-Tractor Station. Uch. zap. Ped. inst. Gerts.  
178:69-82 '59. (MIRA 14:7)  
(Cherepovets District--Pastures and meadows)

GORDEYEVA, T.N.

Comparative characteristics of Cherepovets District meadows in  
areas served by the Abakanovsk and Cherepovets Machine-Tractor  
Stations. Uch. zap. Ped. inst. Gerts. 178:83-86 '59. (MIRA 14:7)  
(Cherepovets District--Pastures and meadows)



GORDEYEVA, V. A.

(3)

✓ 4412. INVESTIGATION OF CHEMICAL REACTIONS IN CATALYTIC CRACKING OF ISO-OCTANE AND N-HEXANE BY KINETIC METHOD. Tishenok, B.V., Andrey, E.S., and Gordeyeva, V.A. (Dokl. Akad. Nauk SSSR (Rep. Acad. Sci. U.S.S.R.)), 11 Jan. 1954, vol. 94, (2), 281-284. Cracking and fractionation were carried out in laboratory plant, which is illustrated, and the primary reactions were disclosed by measuring the products for different reaction times. The chief primary reaction was the rupture of one C-C bond to form one paraffin and one olefin molecule. The usual point of rupture was between the second and third carbon atoms of iso-octane and between the third and fourth of n-hexane. (L).

GURAYEV, V. A.

Coke formation during cracking with aluminum silicate

2

processes, and this is shown for a cracking temp. of 620°  
by the following comparison of time of cracking (min.), %  
coke formation and no. of the coke: 14, 0.06, 119;  
25, 0.15, 25, 860, 0.31, 34. At 40°  
after 60 min. cracking 0.3% coke was formed with an I  
no. of 35. The addition of n-hexane did not affect the I  
no. of the coke.

C. S. Kozel

KLINENOK, B.V.; ANDRUYEV, Ye.A.; GORDIYEVA, V.A.

Formation of coke on aluminosilicate cracking catalysts. Izv.AN SSSR.  
Otd.khim.nauk no.5:525-530 My '56. (MIRA 9:9)

1. Institut fizicheskoy khimii Akademii nauk SSSR.  
(Petroleum coke) (Cracking process)

5(4)

SOV/62-59-1-35/3

AUTHORS:

Sinitsyna, M. D., Zhabrova, G. M., Roginskiy, S. Z.,  
Gordeyeva, V. A.

TITLE:

Emanating Capacity in Topochemical Processes as a Typical  
Feature of the Specific Surface (Emaniruyushchaya sposobnost  
pri topokhimicheskikh protsessakh kak kharakteristika  
udel'noy poverkhnosti)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,  
1959, Nr 1, pp 176 - 178 (USSR)

ABSTRACT:

In order to investigate the changes of the structure and  
specific surface in topochemical processes the authors  
applied the method of emanation. Radiothorium nitrate  
solution was used as emanation source. The advantage of  
radiothorium in comparison to the previously used radium  
(Ref 1) consists in the fact that it forms thoron in syste-  
matic transformation. Since thoron has only a short half-  
life measurements can be carried on without interruption  
(Refs 1 and 2). In the investigation of magnesium hydroxide  
and magnesium oxide samples it was found that there is a  
linear dependence of the emanation coefficient (measured

Card 1/2

Emanating Capacity in Topochemical Processes as a  
Typical Feature of the Specific Surface

SOV/62-59-1-35/2

at room temperature) on the size of the specific surface. This dependence apparently holds also for other systems. It indicates that the determination of the emanation coefficient can be substituted for comparatively difficult and complicated measurements of sorption. First a calibration curve would have to be plotted for each system, however according to several points determined by experiments: emanation coefficient - specific surface. There are 1 figure and 5 references, 2 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: June 28, 1958

Card 2/2

23(4) 23 (5)

**BOB LAY**

**Izvalikov, I.S.**

**STILL:**

Successes of Soviet Electrophotography (Uspehi sovetskoy elektrofotografii) A Scientific and Technical Conference on Questions of Electrophotography (Nauchno-tekhnicheskaya konferentsiya po voprosam elektrofotografii)

**PERIODICAL:**

Zhurnal nauchnoy i prikladnoy fotografii i kinematografii,  
1959, Vol. 4, Nr 2, pp 149-152 (USSR)

**ABSTRACT:**

This is an account of a scientific and technical conference on electrophysics that was to be held in the Soviet Union and evidently took place in 1968 by the Organized in Vil'nyus on September 1-7, 1968 by the USSR Academy of Sciences, the Lithuanian SSR, the Gosstatraznitsa, the Ministry of Higher Education, the Ministry of Science and Technical Policy, the State Scientific and Technical Committee of the Council of Ministers of the Lithuanian S.S.R., and the Mauchno-Issledovatel'skiy Institut elektrofiziki (Scientific Research Institute of Electrodynamics). The conference, attended by over 500 scientists, organizers was opened by the Deputy Chairman of the Council for National Economy of the Lithuanian SSR P.A. Kul'vets, after which the Director of the Institute for Electrophysics, V. Zhilavich, reviewed the state of research and development of electrophysics in the country. He stressed that research in this field should be carried out along the following lines: a) search for new photo-active materials with high dark resistance; b) physical research into the lateral photoeffect; c) development of photoconductor layers; d) development of the theory of the electrophotocopying process. K.S. Lyalikov (speaking at determining the rate of change of the sensitivity of electrophotographic layers in GOST units. H.K. Mityayevich, A. Kalnauskas and G.M. Stukardin) reported on some research on the sensitization of semiconductor in electrophotographic layers. V. Prickins gave a report on highly sensitive electrophotographic layers and an electrophotocopying device, and reviewed the formation process of the latent electrophotographic image on the basis of the zonal electrostatic effect. He also described the design of an electron microscope for determining sensitivity by the contrast method. A change on the surface of the photoconductor layer and the circuit of the electrophotocopying device. Anilov finished describing the latter and then spoke on the mechanics and kinetics of the development of the latent electrophotographic image as a liquid developer.

Card 3/20

80777-4-2-15/78

Successes of Soviet Electrophotography: A Scientific and Technical Conference on Questions of Electrophotography

K.M. Vinogradov described some of the features of the cascade and liquid methods of electrophotographic development. Yu.E. Karpashko devoted his report to the criterion of light sensitivity of the electrophotographic process. After the reports, a discussion took place on methods of determining the light sensitivity of electrophotographic layers. A.N. Chernyshev spoke on the prospects of developing polygraphic processes using electric fields for the formation of images. He also spoke on the use of the electric field in the development of electrophotographic reproducing equipment. A.S. Pashka (speaking also for I.I. Zhilovitch, A.S. Borisovich, M.M. Galvitskiy and M.I. Rukhtauskas) reported on the use of electrophotographic methods in recording oscillographs and other recording instruments.

V.P. Luchbenko (speaking also for L.M. Balin) spoke on the possibility of electrophotographically recording images from electron-beam tubes. L.S. Korol' (speaking also for E.B. Markovich, I.I. Kozlovskaya, B.I. Kalininskaya, M.K. Mayens, I.I. Zhilovitch and E.A. Montrinas) gave a detailed description of laboratory and machine methods of producing photoconductor papers (zinc oxide was used). A.A. Jukhly (speaking also for I.I. Zhilovitch, O.I. Gerasimov, A.S. Borisovich, M.I. Rukhtauskas and M.I. Galvitskiy) reported on the use of electrophotographic methods in recording oscillographs and other recording instruments. V.P. Luchbenko (speaking also for L.M. Balin) spoke on the possibility of electrophotographically recording images from electron-beam tubes. L.S. Korol' (speaking also for E.B. Markovich, I.I. Kozlovskaya, B.I. Kalininskaya, M.K. Mayens, I.I. Zhilovitch and E.A. Montrinas) gave a detailed description of laboratory and machine methods of producing photoconductor papers (zinc oxide was used). A.A. Jukhly (speaking also for I.I. Zhilovitch, O.I. Gerasimov, A.S. Borisovich, M.I. Rukhtauskas and M.I. Galvitskiy) reported on the use of electrophotographic methods in recording oscillographs and other recording instruments. V.P. Luchbenko (speaking also for L.M. Balin) spoke on the possibility of electrophotographically recording images from electron-beam tubes. L.S. Korol' (speaking also for E.B. Markovich, I.I. Kozlovskaya, B.I. Kalininskaya, M.K. Mayens, I.I. Zhilovitch and E.A. Montrinas) gave a detailed description of laboratory and machine methods of producing photoconductor papers (zinc oxide was used). A.A. Jukhly (speaking also for I.I. Zhilovitch, O.I. Gerasimov, A.S. Borisovich, M.I. Rukhtauskas and M.I. Galvitskiy) reported on the use of electrophotographic methods in recording oscillographs and other recording instruments.

Card 6/10





5(4)

SOV/62-59-4-5/42

AUTHORS:

Zhabrova, G. K., Gordeyeva, V. A.

TITLE:

On Some Factors Determining the Onset of the Induction Period During Topochemical Processes (O nekotorykh faktorakh, opredelyayushchikh poyavleniye induktsionnogo perioda v topokhimicheskikh protsessakh)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, pp 596-599 (USSR)

ABSTRACT:

It is typical of topochemical processes that an induction period occurs in most cases on the kinetic curves which represent the dependence of the quantity of the substance transformed on the duration of the process. In the present work the thermal decomposition of magnesium hydroxide, magnesium carbonate, zinc carbonate, and potassium bicarbonate has been investigated. To solve the question of the induction period kinetic measurements have been taken at different rates of temperature rise in the reaction apparatus. It has been found that the duration of the induction period and the position of the maximum on the autocatalytic rate curve are determined by the heating conditions of the solids investigated. Figures 2 and 3 show the kinetic curve

Card 1/3

On Some Factors Determining the Onset  
Topochemical Processes

SOV/62-59-4-5/42  
of the Induction Period During

of the dehydration of magnesium hydroxide at  $320^{\circ}$ , the heating curves and the acceleration curves at a "normal" and "reduced" heating rate. Although the kinetic curves of figures 2 and 3 might be related to different processes in view of their character (Ref 1) they belong actually to one and the same process. The only difference is in the heating rate of the initial material. Similar phenomena have been observed with zinc hydroxide, magnesium carbonate, potassium carbonate, and some other systems. Figure 4 shows autocatalytic curves for potassium bicarbonate. The peak rate is reached approximately at the same time as the temperature. The peak amplitude and the form of the catalytic curve are also determined by the rate of temperature rise. The strong dependence of the induction period on the heating rate is due to the supply of heat and the temperature rise of the solids. There are 4 figures and 9 references, 5 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of  
Physical Chemistry of the Academy of Sciences, USSR)

Card 2/3

GORDEYEVA, V.A.; YEGOROV, Ye.V.; ZHABROVA, G.M.; KADENATSI, B.M.;  
KUSHNEREV, M. Ya.; ROGINSKIY, S.Z.

Use of ionizing radiation in the study of the decomposition  
processes of copper and nickel oxalates. Dokl. AN SSSR 136  
no.6:1364-1367 F '61. (MIRA 14:3)

1. Institut fizicheskoy khimii AN SSSR. 2. Chlen-korrespondent  
AN SSSR (for Roginskiy).

(Copper oxalate)  
(Nickel oxalate)  
(Radiation)

S/844/62/000/000/115/129  
D207/D307

AUTHORS: Roginskiy, S. Z., Zhabrova, G. M., Gordeyeva, V. A.,  
Yegorov, Ye. V., Kadenatsi, B. M. and Kushnerev, M. Ya.

TITLE: The use of ionizing radiation in investigation of topo-  
chemical processes

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 668-673

TEXT: A study was made of the differences between the topochemical processes of thermal decomposition and of decomposition, using 0.6 - 2 Mev electrons. The substances decomposed were copper oxalate ( $\text{CuC}_2\text{O}_4 \cdot 1/2\text{H}_2\text{O}$ ) and nickel oxalate ( $\text{NiC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$ ) which were prepared by precipitating nitrate solutions with oxalic acid at  $50^\circ\text{C}$ ; the samples were in the form of thin layers of powder. Thermal decomposition in vacuum at  $280^\circ\text{C}$  yielded 85% Cu + 15%  $\text{Cu}_2\text{O}$  and 95% Ni + 2.0% NiO + 3% undecomposed residue. Thermal decomposition in air at about  $300^\circ\text{C}$  yielded 50% CuO + 50%  $\text{Cu}_2\text{O}$  and 100% NiO. Elec-  
Card 1/2

The use of ionizing ...

S/844/62/000/000/115/129  
D207/D307

tron irradiation ( $3.6 \times 10^9$  -  $3.3 \times 10^{10}$  rad) at  $100^\circ\text{C}$  yielded usually pure metals with large (10 - 40%) residues undecomposed oxalates; the metal yield increased with the radiation dose. Strong preliminary irradiation (at least  $0.6 \times 10^9$  rad) accelerated strongly the subsequent thermal decomposition in vacuum. The mechanisms of thermal and electron-bombardment decomposition were the same; holes generated by heat or irradiation neutralized partly or completely the double charged oxalate ions which then moved to the surface and were emitted as  $\text{CO}_2$ ; electrons also generated by heat or irradiation neutralized the doubly charged metal cations which yielded pure metals. Oxides were formed as an intermediate stage in the production of pure metals; in air, oxides were produced also by oxidation of the pure metal products. The essential difference between electron bombardment and heat lay in the greater carrier-generation efficiency of the former. There are 2 figures and 1 table. ✓

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry, AS USSR); Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AS USSR)

Card 2/2

39631

S/195/62/003/004/001/002  
EO75/E436

11600

AUTHORS: Zhabrova, G.M., Kadenatsi, B.M., Zvonov, N.V.,  
Yegorov, Ye.V., Arizov, T.S., Batalov, A.A.,  
Gordeyeva, V.A., Glazunov, P.Ya.

TITLE: Preparation of finely divided metals and oxides by  
radiation

PERIODICAL: Kinetika i kataliz, v.3, no.4, 1962, 610-613

TEXT: A possibility was investigated of preparing metals and oxides in a finely divided form by irradiation of  $Zr(OH)_4$ ,  $Al(OH)_3$ ,  $Fe(OH)_3$ , Ni and Cu oxalates and basic copper carbonate with accelerated electrons having the energy of 0.8 Mev. The temperature of the samples during irradiation (1 to 2 g) did not exceed 40 to 50°C. Thermal decomposition at 400 to 500°C was also carried out for comparison with the irradiated materials. The decomposition of all the compounds commenced at radiation doses exceeding  $10^8$  rads and was intense at  $10^9$  to  $10^{10}$  rads. At the latter doses the compounds were almost completely  
Card 1/3

Preparation of finely ...

5/195/62/003/004/001/002  
E075/E436

decomposed. It was shown that the specific surface of the metals and oxides prepared by the irradiation method exceeds in most cases that of the samples prepared by the usual high-temperature pyrolysis. An especially marked advantage was noticed for the radiolysis of Cu and Ni oxalates. The surface area of the oxalate decomposition products consisting predominantly of metals was sometimes 10 or more times that of the decomposition products obtained by vacuum pyrolysis. Radiolysis of  $Zr(OH)_4$  and  $Fe(OH)_3$  gives dispersed oxides having considerable surface areas.  $Al(OH)_3$  is an exception,  $Al_2O_3$  produced by the radiolysis having a similar surface area to that of  $Al_2O_3$  obtained by pyrolysis. The metals and oxides prepared by radiolysis may find application as low temperature catalysts and adsorbents. There are 2 figures and 2 tables.

ASSOCIATIONS: Institut khimicheskoy fiziki AN SSSR  
(Institute of Chemical Physics AS USSR)  
Institut atomnoy energii im. I.V.Kurchatova AN SSSR  
(Institute of Atomic Energy imeni I.V. Kurchatov  
AS USSR)

Card 2/3

S/195/62/003/004/001/002  
E075/E436

Preparation of finely ...

Institut fizicheskoy khimii AN SSSR  
(Institute of Physical Chemistry AS USSR)

SUBMITTED: March 15, 1962

Card 3/3



ZHABROVA, G.M.; KADENATSI, B.M.; AZIZOV, T.S.; GORDEYEVA, V.A.; GLAZUNOV, P.Ya.;  
GEZALOV, A.A.

Radiation method of preparation of highly dispersed metals and oxides.  
Izv.AN SSSR.Otd.khim.nauk no.9:1690-1692 S '62. (MIRA 15:10)

1. Institut khimicheskoy fiziki AN SSSR i Institut fizicheskoy khimii  
AN SSSR.

(Metallic oxides)

(Colloids)

(Radiation)

YEMEL'YANOVA, N.D.; PROKOP'YEV, V.N.; GORDEYEVA, V.N.; LAZARENKO, L.P.;  
BUBLIYENKO, A.V.; KOZLOVSKAYA, O.L.

Materials on the study of the ticks of the genus Ixodes (family  
Ixodidae) of northeastern Asia. Dokl. Irk. gos. nauch.-issl. pro-  
tivotchum. inst. no.5:188-193 '63 (MIRA 18:1)

GORDEYEVA, V.P.; BELOSLYUDOV, G.A.

First findings of argasid ticks of the group of Argas reflexus  
F. in the Maritime Territory. Dokl. Irk. gos. nauch.-issl.  
protivochum. inst. no.5:194-195 '63 (MIRA 19:1)

GORDEYEVA, V.S.

Mineralogy of the xenoliths of the ultrabasic rocks in the basalts  
of Buryatia. Min.sbor. 18 no.1:96-99 '64.

1. Gosudarstvennyy universitet imeni Ivana Franko, L'vov. (MIRA 18:5)

GORDEYEVA, Ye.K.; MARINETS, T.K.; TIKHODKIV, N.N.; TUSHINSKIY, L.I.

A unit for testing metals for lasting strength and creep in ionized gaseous media. Zav.lab. 21 no.4:487-488 '55 (MLRA 8:6)

1. Leningradskiy politekhnicheskii institut imeni M.I.Kalinina  
(Creep of metals)(Metals--Testing)(Testing-machines)

BASIJEV, I.M.; GUSEVA, V.I.; GROYSMAN, M.Ya.; KANTOR, F.S.; Principal;  
uchastiyas: PAKIN, K.V.; GURDEYEVA, Z.I.

Use of the continuous method for the production of black-extended  
butadiene-styrene rubber. Kauch. i rez. 24 no.4:8-12 Ap '65.  
(MIRA 18:5)

1. Gosudarstvennyy proyektirnyy i nauchno-issledovatel'skiy institut  
promyshlennosti sinteticheskogo kauchuka i Nauchno-issledovatel'skiy  
institut shinnoy promyshlennosti.

S/191/60/000/005/013/020  
B004/B064

AUTHORS: Rus'yanova, N. D., Gordeyeva, Z. K., Belyayeva, G. F.

TITLE: Production of Dicarboxylic Acids From By-products of the Coke Industry (Liquid Oxidation of Phenanthrene)

PERIODICAL: Plasticheskiye massy, 1960, No. 5, pp. 43-46

TEXT: The authors discuss the development of a cheap method of producing dicarboxylic acids. Phenanthrene oxidized with peracetic acid is mentioned as suitable initial material. Resins on the basis of diphenic acid are better than resins produced from phthalic anhydride. First, the formation of peracetic acid from 112 moles of acetic acid and 16 moles of 30%  $H_2O_2$  at  $80^\circ C$  was studied. The amount of peracetic acid reached a maximum after 2-2.5 hours, which, however, was not sufficient to warrant an intensive oxidation of phenanthrene. Therefore, various acid catalysts were used ( $H_2SO_4$ ,  $H_3PO_4$ ,  $HNO_3$ ,  $KHSO_4$ ,  $K_2S_2O_7$ , as well as ortho-, meta- and hexametaphosphates). A 66% transformation of  $H_2O_2$  into peracetic acid

Card 1/2

Production of Dicarboxylic Acids From  
By-products of the Coke Industry (Liquid  
Oxidation of Phenanthrene)

S/191/60/000/005/013/020  
B004/B064

was attained with  $\text{KHSO}_4$  after 1.5 h. The reaction temperature was raised to  $95^\circ\text{C}$ . Best results at  $95^\circ\text{C}$  were obtained with  $\text{K}_2\text{S}_2\text{O}_7$ : 88% yield.

Diphenic acid was yellowish. White diphenic acid was obtained with  $(\text{NaPO}_3)_6$ , which needed no further purification. The yield was 74-75%. ✓

After having checked the optimum amount of catalyst and dependence of diphenic acid yield on the time of oxidation, the following method is suggested: 1 kg of 93% phenanthrene and 150-200 g of catalyst are dissolved in 5 l of 98% acetic acid, heated to  $95^\circ\text{C}$ , and subsequently 30%  $\text{H}_2\text{O}_2$  was added, i.e., 3 l when  $(\text{NaPO}_3)_6$  was used as a catalyst, and 5 l when  $\text{K}_2\text{S}_2\text{O}_7$  was used. Above  $95^\circ\text{C}$ , too much  $\text{H}_2\text{O}_2$  is lost in side reactions. 70% diphenic acid crystallizes when cooling down to  $20-25^\circ\text{C}$ . The remaining 10-15% of the total yield are precipitated after distilling off acetic acid in vacuo, extracting the residue with 10% soda solution, and adding concentrated  $\text{HCl}$ . Yields of 70-75% were reached when 80% phenanthrene was used. There are 4 figures, 3 tables, and 8 references: 4 Soviet, 3 US, and 1 German.

Card. 2/2



S/068/61/000/007/001/001  
E071/E435

AUTHORS: Rus'yanova, N.D., Gofman, M.V., Gordeyeva, Z.K.,  
Privalov, V.Ye., Zubok, A.M. and Khomutinkin, G.V.

TITLE: Production of High Percentage Phenanthrene

PERIODICAL: Koks i khimiya, 1961, No.7, pp.48-52

TEXT: It was recently established that phenanthrene can be used for the production of diphenic acid (a raw material for high quality plastics and resins) and 9-10 phenanthrene quinone (a valuable fungicide) but a technology for its production on coke-oven by-product plants was not available. The authors carried out an investigation in order to establish the most suitable starting raw material and operating equipment and practice for the production of phenanthrene fraction from which a high percentage (above 90%) phenanthrene can be obtained. As about 80% of phenanthrene in tar is concentrated in the anthracene oil, the latter was considered as the most suitable starting material. Calculations of the necessary column efficiencies for the separation of the pair phenanthrene-carbazole were carried out for a fraction containing 27% of phenanthrene and 2% carbazole (anthracene oil obtained from Card 1/6

S/068/61/000/007/001/001  
E071/E435

Production of High ...

the first anthracene fraction) and for a fraction containing 25% of phenanthrene and 11% of carbazole (a mixture of anthracene oil and the second anthracene fraction). The results indicated that the first type of raw material can be rectified on a column equivalent to 17 theoretical plates into an 80% phenanthrene fraction, while in order to obtain a similar product from the second type of raw material, a column equivalent to 50 theoretical plates would be necessary. Laboratory distillations of the above two raw materials as well as of the first anthracene fraction and raw anthracene were carried out on a column equivalent to 25 theoretical plates. The results of these laboratory distillations showed that the optimum raw material for the production of a concentrated phenanthrene fraction is anthracene oil. The laboratory results were checked on an industrial scale in the by-product plant of the Nizhne-Tagil Metallurgical Combine. A mixture of anthracene oil from the first and second anthracene fractions, containing 24% of phenanthrene, 11% of carbazole and 3% of anthracene was used for the experiments. The oil was washed with a 15% alkali and 25% acid. Rectification of the

Card 2/6

S/068/61/000/007/001/001  
E071/E435

Production of High ...

washed oil (29.5 tons) was done on a column 1 m in diameter with 33 bubble cup trays. The collection of the fractions was done from a side outlet on the 27th plate. During the rectification two fractions were collected: first up to 320°C (a light fraction) and the second, phenanthrene fraction 320 to 345°C (25.5% of the charge). This contained 80% of phenanthrene, 8% of carbazole and 7.7% of anthracene. All together 84.97% of phenanthrene was recovered in the fraction. It is considered that a vacuum distillation would be more suitable. The required efficiency of the column for the separation of the pair phenanthrene-carbazole for a raw material containing 11% of carbazole under various pressures was calculated. On the basis of the above investigations, the following technological scheme for the production of phenanthrene fraction is proposed: anthracene oil washed from phenols and bases is heated in a pipe furnace to 280°C and passed into the first column equivalent to 18 to 20 theoretical plates. The light fraction is collected at the top, while the residue from the bottom is passed into a second column equivalent to 25 to 28 theoretical plates. The phenanthrene fraction is collected

Card 3/6

S/068/61/000/007/001/001  
E071/E435

Production of High ...

from the top of this column while a part of the residue from the bottom is utilized as a heat carrier, i.e. it is passed into the tube furnace, where it is again preheated and returned to the second column. Both columns operate under a vacuo at 100 mm Hg. The production of high percentage phenanthrene from the phenanthrene fraction was also tested. The fraction contains anthracene, carbazole and various oils (mainly a mixture of methyl homologues of fluorene, phenanthrene and anthracene). Phenanthrene used for further oxidation should be freed from carbazole and resinous substances. It was established that on treatment of phenanthrene fraction with 85% sulphuric acid at 35 to 50°C, phenanthrene is not sulphonated but a carbazole sulphate is obtained which, after separation of the acid layer, can be recovered by dilution of the latter with water (to an acid concentration of 50 to 55%). The treatment removes also resinous substances. This was as follows: the fraction was dissolved in xylene 1:2 or benzole 1:3 and treated with 85% sulphuric acid at 25 to 50°C. The consumption of acid depends on the concentration of carbazole. At a content of 2 to 3%, one

Card 4/6

S/068/61/000/007/001/001  
E071/E435

## Production of High ...


washing with 5 vol.% of sulphuric acid for 15 minutes is sufficient. With a carbazole content of 8 to 10%, 2 to 3 washings, each time with fresh acid, are necessary. After the treatment with sulphuric acid the product usually contained not more than 0.2 to 0.3% of carbazole. After distilling off the solvent and a redistillation of the fraction to remove oils, it was pressed at 100 to 120 atm. A 90 to 92% product, melting at 91 to 93°C with an 80% yield was obtained. The main admixture was anthracene. Some laboratory tests (not described) indicated that the product is suitable for the production of diphenic acid. Under industrial conditions, a product melting at 92 to 94°C was obtained. After a single recrystallization from alcohol (1:5), phenanthrene melting at 99 to 100°C was obtained. There are 1 figure, 6 tables and 13 references: 8 Soviet-bloc and 5 non-Soviet-bloc. The work of L.D.Gluzman (Ref.6: Koks i khimiya, 1959, No.2) is mentioned. The references to English language publications read as follows: R.E.Dean, E.N.White, D.McNeil, J.Appl.Chem., 1953, 3, 10, 469; V.N.Kamat, J.de Sa, F.Fernandes, J.Sci.Ind.Res. 1956, 15, p.8; U.S.Patent 2575314, C.A., 1952, 8152.

Card 5/6

Production of High ...

S/068/61/000/007/001/001  
E071/E435

ASSOCIATIONS: Ural'skiy politekhnicheskiy institut (Ural  
Polytechnical Institute) (Rus'yanova, N.D.,  
Goftman, M.V. and Gordeyeva, Z.K.);  
VUKhIN (Privalov, V.Ye.);  
Nizhne-Tagil'skiy metallurgicheskiy kombinat  
(Nizhne-Tagil Metallurgical Combine) ( Zubok, A.M.  
and Khomutinkin, G.V.)



Card 6/6

KHARLAMPOVICH, G.D.; RUS'YANOVA, N.D.; MEL'NIKOVA, V.I.; GORDEYEVA, Z.K.;  
Prinimali uchastiye: MIRONOV, V.I., laborant; MAKAROVA, Z.A.,  
laborant; KUDRYASHOVA, R.I., student; TATARUOV, G.P., student;  
SELITSKIY, G.A., student; IL'CHENKO, P.P., student; MOSKOVSKIKH, V.V.,  
student; YEVSEYEV, Ye.I., student

Studying the new method of ammonia recovery in an experimental  
industrial installation. Koks i khim. no.2:34-38 '62. (MIRA 15:3)

1. Ural'skiy politekhnicheskiy institut.  
(Coke-Oven gas) (Ammonia)

ALEKSANDROV, B.M., nauchnyy sotrudnik; ALEKSANDROVA, T.N., nauchnyy sotrudnik; BELYAYEVA, K.I., nauchnyy sotrudnik; GORBUNOVA, Z.A., nauchnyy sotrudnik; GORDEYEVA-PERTSEVA, L.I., nauchnyy sotrudnik; GORDEYEVA, L.N., nauchnyy sotrudnik; GULYAYEVA, A.M., nauchnyy sotrudnik; DMITRENKO, Yu.S., nauchnyy sotrudnik; ZABOLOTSKIY, A.A., nauchnyy sotrudnik; MAKAROVA, Ye.F., nauchnyy sotrudnik; NOVIKOV, P.I., nauchnyy sotrudnik; POKROVSKIY, V.V., nauchnyy sotrudnik; SMIRNOV, A.P., nauchnyy sotrudnik; STEFANOVSKAYA, A.P., nauchnyy sotrudnik; URBAN, V.V., nauchnyy sotrudnik. Prinimali uchastiye: BALAGUROVA, M.V., nauchnyy sotrudnik; VEBER, D.G., nauchnyy sotrudnik; POTAPOVA, O.I., nauchnyy sotrudnik; SOKOLOVA, V.A., nauchnyy sotrudnik; FILIMONOVA, Z.I., nauchnyy sotrudnik; POPENKO, L.K., nauchnyy sotrudnik; ZYTSAR', N.A., red.; PRAVDIN, I.P., red.; PANKRASHOV, A.P., red.; SHEVCHENKO, L.V., tekhn.red.

[Lakes of Karelia; natural features, fishes, and fisheries] Oзера Karelii; priroda, ryby i rybnoe khoziaistvo; spravochnik. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR, 1959. 618 p. (MIRA 13:8)  
(Continued on next card)



ALEKSANDROV, B.M. --- (continued) Card 2.

1. Russia (1917- E.S.F.S.R.) Karel'skiy ekonomicheskii administrativnyy rayon. Sovet narodnogo khozyaystva. 2. Karel'skoye otdeleniye Vsesoyunnogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva (for Aleksandrov, Aleksandrova, Be-lyayeva, Gorbunova, Gordeyeva-Partseva, Gordeyeva, Gulyayeva, Dmitrenko, Zabolotskiy, Makarova, Movikov, Pokrovskiy, Smirnov, Stefanovskaya, Urban). 3. Karel'skiy filial AN SSSR (for Balagurova, Veber, Potapova, Sokolova, Filimonova, Popenko).  
(Karelia--Lakes)

KAPLAN, Il'ya Abramovich; BAZHENOV, G.M., doktor fiz.-matem. nauk, prof., retsenezent; GORDEYEVSKIY, D.Z., dots., otv. red.; SOLODOVNIKOV, R.V., dots., otv. red.; BAZILYANSKAYA, I.L., red.

[Practical studies in higher mathematics; analytical geometry, plane and solid; differential calculus of functions of one and several independent variables] Prakticheskie zaniatiia po vysshei matematike; analiticheskaya geometriia na ploskosti i v prostranstve, differentsial'noe ischislenie funktsii odnoi i mnogikh nezavisimyykh peremennykh. Izd.2., dop. i perer. Khar'kov, Izd-vo Khar'kovskogo univ., 1965. 574 p. (MIRA 18:3)

GORDEYKO, O. N.

GORDEYKO, O. N. -- "INVESTIGATION OF SOME QUESTIONS OF MULTILADING DESIGN." SUB 15  
DEC 52. MOSCOW MINING INSTITUTE. I. V. STALIN (DISSERTATION FOR THE DEGREE OF  
CANDIDATE IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

GORDEYKO, O. N.

"Effect of Elasticity of the Shaft Plumb Lines on the Accuracy of Point  
Projection in Geometric Orientation of the Shafts".  
Nauch. tr. Mosk. gosn. in-ta, No. 12, pp 57-70, 1954.

Effect of the helical shape of the cable of the shaft plumb line as  
source of linear errors of point projections is analyzed. Suggestions to keep the  
errors within 0.2 mm tolerances are given. (RZhAstr, No. 1, 1956)

SO: Sum No 884, 9 Apr 1956